

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Luda Voskov, Project Manager;
SSDAP/Superfund Section, Remediation
Division

Date: January 14, 2010

From: Larry Champagne; Technical Support Section, Remediation Division

Subject: Gulfco Marine Maintenance NPL Superfund Site
Updated Screening-Level Ecological Risk Assessment (SLERA)
December 22, 2009

The Natural Resource Trustees and I have completed our review of this document and the associated responses to our previous comments and have the additional comments below, most of which were discussed at the joint meeting on January 6, 2010.

General Comments:

1. As discussed at the January 6, 2010 meeting, some type of scientific management decision point (ecological risk management recommendation) is needed at the end of this SLERA. The results indicate that there is potential for low to moderate levels of ecological risk in all media for multiple receptors throughout the site. This conclusion is based on the exceedance of protective ecological benchmarks (such as the default PCL) as well as Hazard Quotients that exceed 1. The SLERA should conclude with an acknowledgement of these potential risks and resolve to move into a Baseline Ecological Risk Assessment to further assess the potential risks or to develop a plan to address the risks (e.g., by eliminating the exposure pathway).
2. Also as discussed at the meeting, our previously submitted sediment ERM-Quotient analysis for the North Area Wetlands that indicated a probability of toxicity to the benthic community in four of the five samples should be considered an additional line of evidence when making a risk management recommendation.
3. The figures should be revised to include all COPEC concentrations that exceed the ecological benchmarks (ERL, PCL, ERM, AET, or other screening benchmarks used).
4. All review comments should be addressed in a response prior to or as an accompaniment to the next review document.

Specific Comments:

1. P. 16, Section 2.6.2 Sediment and associated tables and figures: As explained at the meeting, there continues to be some confusion over the terminology regarding TCEQ's sediment benchmarks. It is the midpoint value between the initial and second effects level benchmarks - not the initial effects level itself- that is considered to be the default sediment PCL for protection of the benthic community for a particular COPEC.
2. P. 31, Section 3.4.6 North Area Wetlands Sediment and elsewhere: The reference to Figure 9 should be to Figure 11. All text references to figures (and tables) should be verified for accuracy.
3. P. 36, Section 4.1.4 General Exposure Analysis Uncertainties, second full paragraph: Summary statistics are not always an appropriate representation of organisms with small home ranges – particularly for benthic organisms which may have a community within a limited spatial area. Omit the sentence which states “However, since the assessment endpoint is based on community survival and productivity and not individual survival and productivity, it is acceptable to use summary statistics to represent community risks.”
4. P. 45, Section 5.2.3 North Area Wetlands, last sentence: This sentence should be removed or reworded as it appears misleading. If it intended to say that the EPCs of lead and zinc when compared to their ERL/ERM midpoints resulted in HQs less than one, then references should be made to the supporting figure and table. It is assumed that Figure 11 mentioned on the previous page applies, but no supporting table is cited and Table 25 does not list lead.
5. Table 23 and elsewhere: As discussed at the meeting, the sediment ingestion rate for the sandpiper is incorrect (factor of 10 off) and must be revised. This will have a cascading effect on tables (and possibly text) where sandpiper intake and HQs are presented.
6. Table C-5 and elsewhere: The parenthetical phrase “normalized for bw” should be removed or modified as it implies that the soil ingestion rate value has already been divided by the body weight of the receptor. Also, an indication that the rates reflect dry weight should be made. Finally, the “see Food Conc page” phrase should be changed to “see Tables C-15, 16”.